

Sea Level Rise and State Infrastructure

The Propeller Club of Northern California
Storms, Flooding & Sea Level Defense Conference
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OFFICE OF PLANNING &
SUSTAINABLE DEVELOPMENT
STATE OF HAWAII





THE HAWAI'I OCEAN RESOURCES MANAGEMENT PLAN

----- 2020 -----

COLLABORATIVE COASTAL ZONE MANAGEMENT FROM MAUKA TO MAKAI

3 Focus Areas

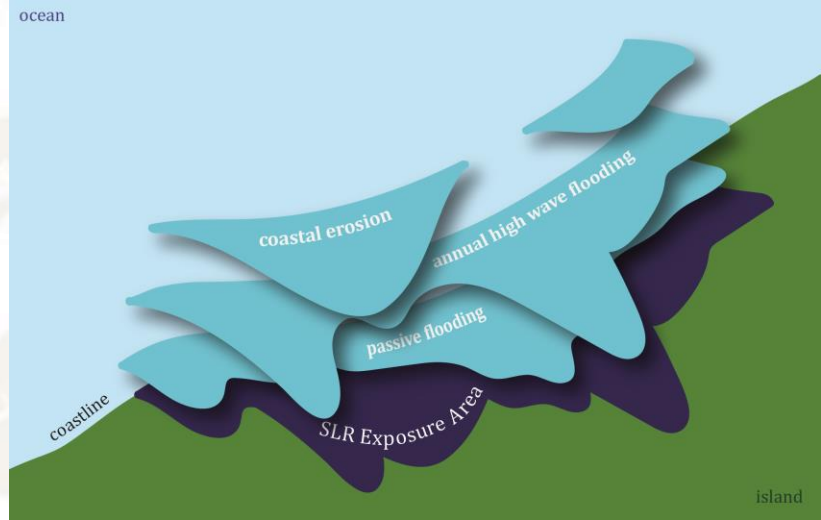
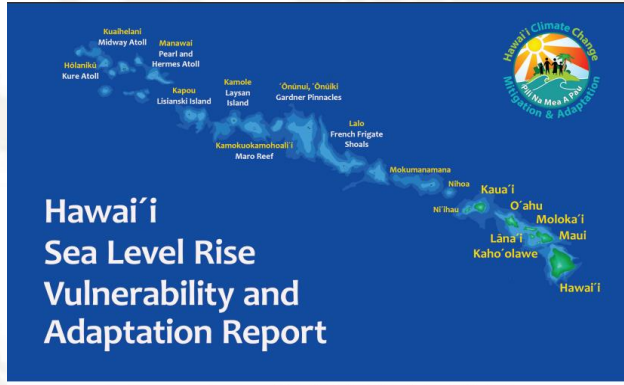
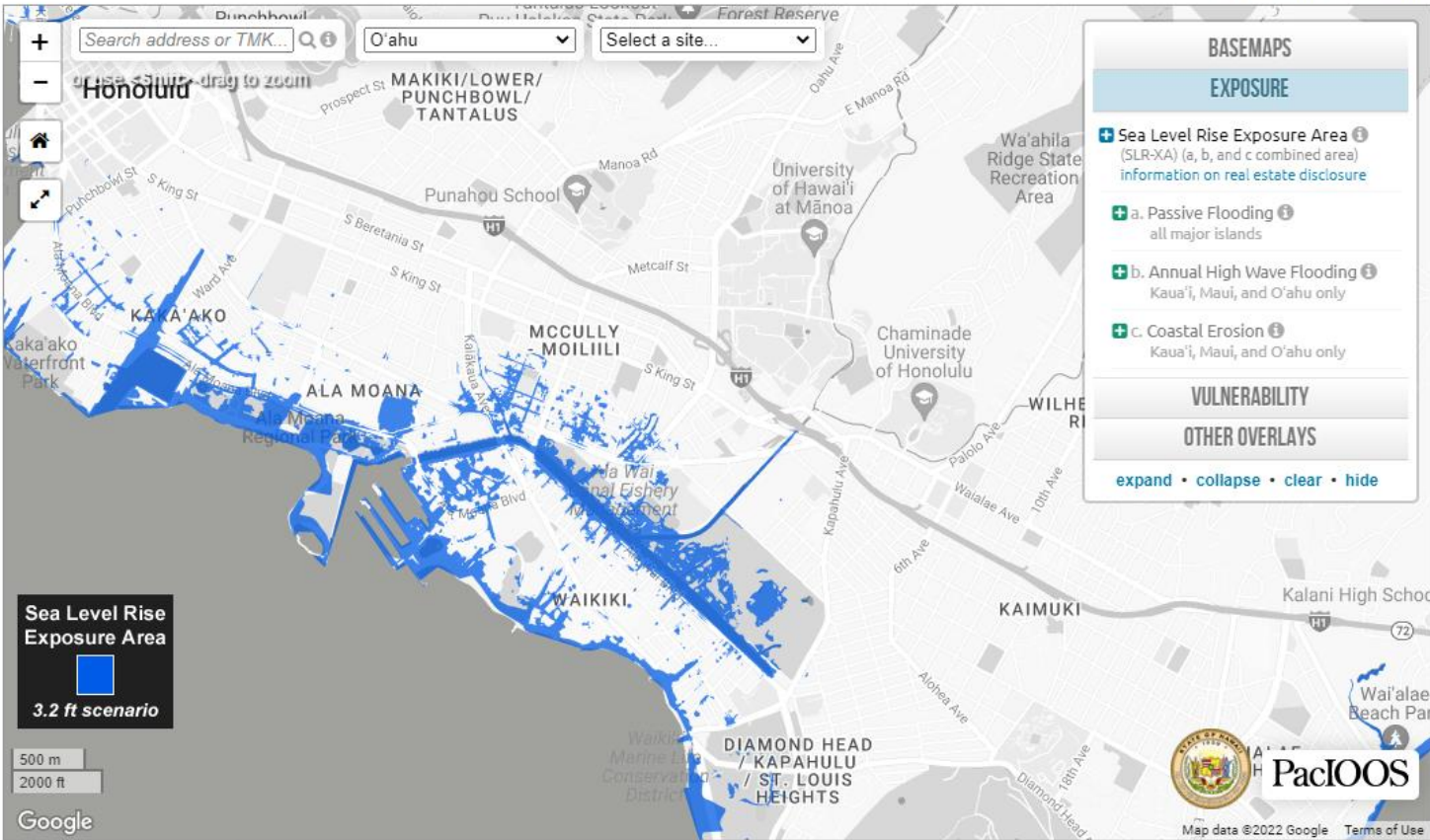
- Development & Coastal Hazards
- Land-Based Pollution
- Marine Ecosystem

Hawai'i Sea Level Rise Viewer

Sea Level Rise : State of Hawai'i Sea Level Rise Viewer

An Interactive Mapping Tool in Support of the State of Hawai'i Sea Level Rise Vulnerability and Adaptation Report

[view full-screen map](#)



Act 178, SLH 2021 Overview

Requires the OPSD, in coordination with state agencies with operational responsibilities over state facilities, to:

1. Identify **existing and planned facilities** that are vulnerable to sea level rise, flooding impacts, and natural hazards;
2. Assess **options to mitigate** the impacts of sea level rise to those facilities; and
3. Submit annual reports to the governor, legislature, and the Hawai'i Climate Change Mitigation and Adaptation Commission regarding **vulnerability and mitigation assessments** for state facilities and **progress toward implementing** sea level rise adaptation in **future plans, programs, and capital improvement** needs and decisions.

Phased Approach



Exposure Assessment & 2021 Annual Report

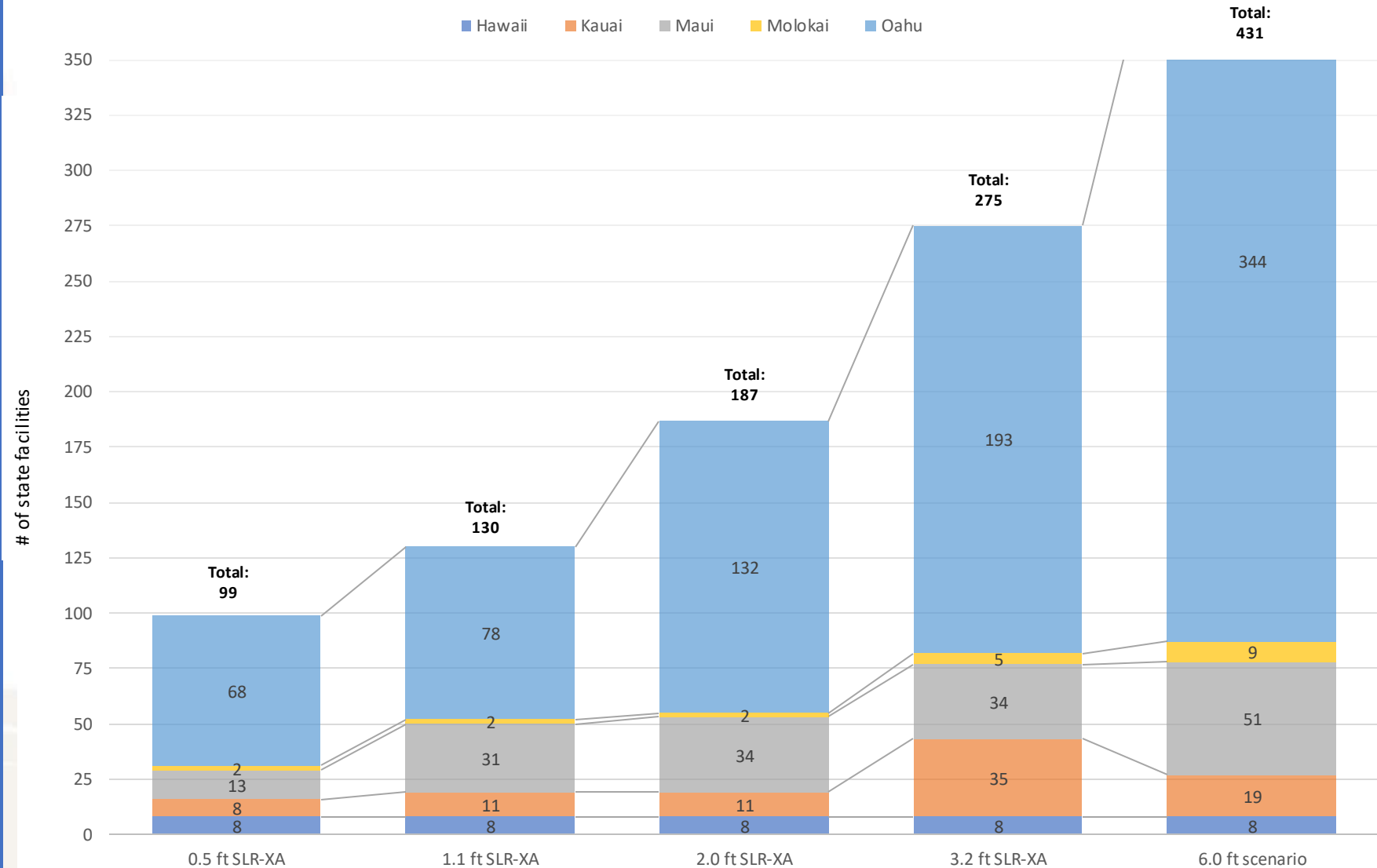
- Data Verification
 - Collaboration with partner agencies
 - CZM staff verification of GIS coordinates
- Analysis
 - 4 SLR-XA scenarios
 - NOAA 6ft projections



Exposure Assessment Findings

- All major islands, except Lānaʻi, have vulnerable facilities in all scenarios
- Statewide, there is an exponential increase in the number of vulnerable facilities as sea level rise impacts increase

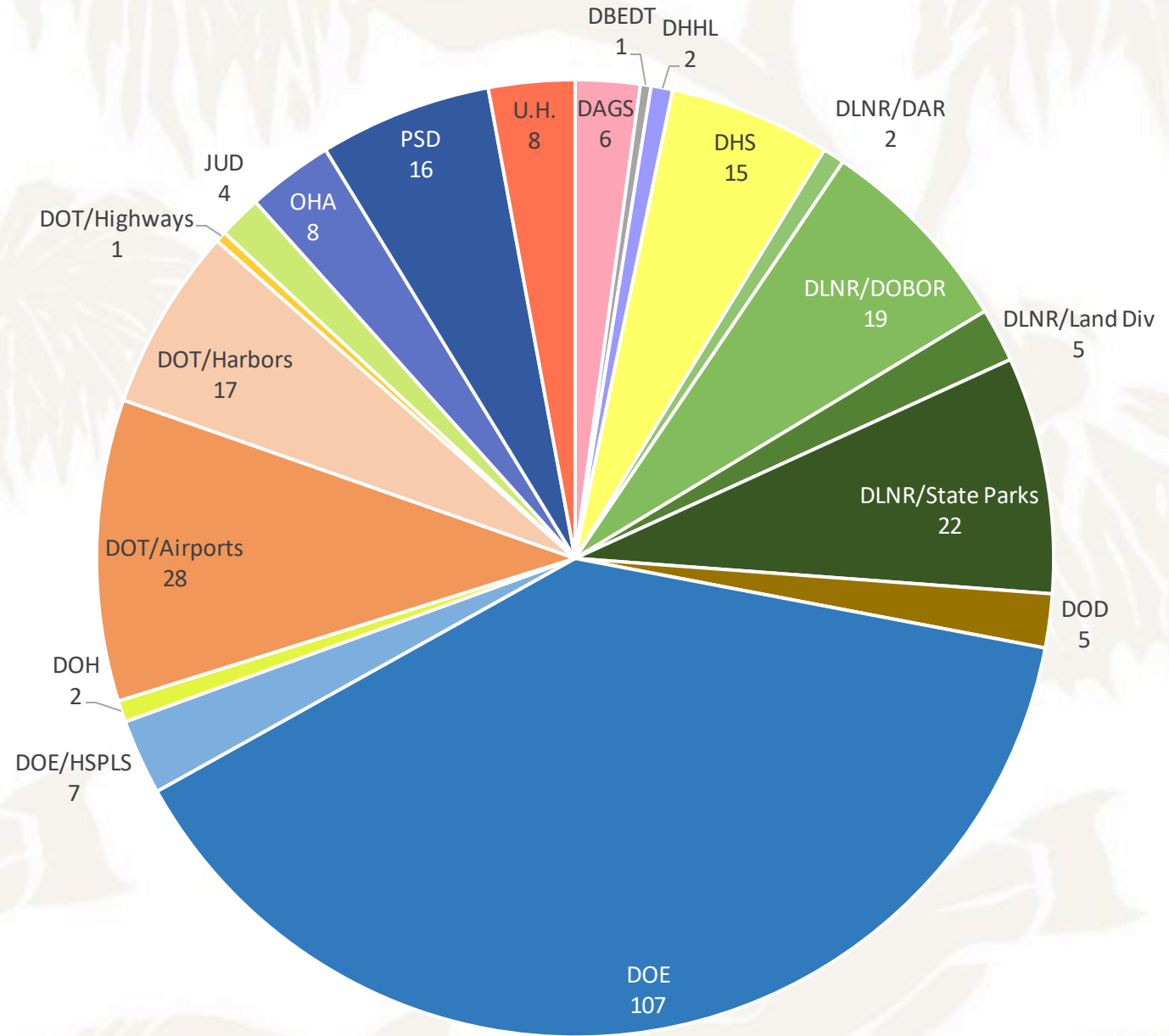
FACILITIES IN SLR-XA BY ISLAND



Exposure Assessment Findings

➤ Dept of Education, Dept of Transportation and Dept of Land and Natural Resources are most impacted in all scenarios

State Facilities in the 3.2 ft SLR-XA by Agency/Dept



How are other coastal states and cities assessing sea level rise vulnerability?

**Broad recommendations
and best practices**

**Specific procedure with
standardized templates**



Literature Review Analysis

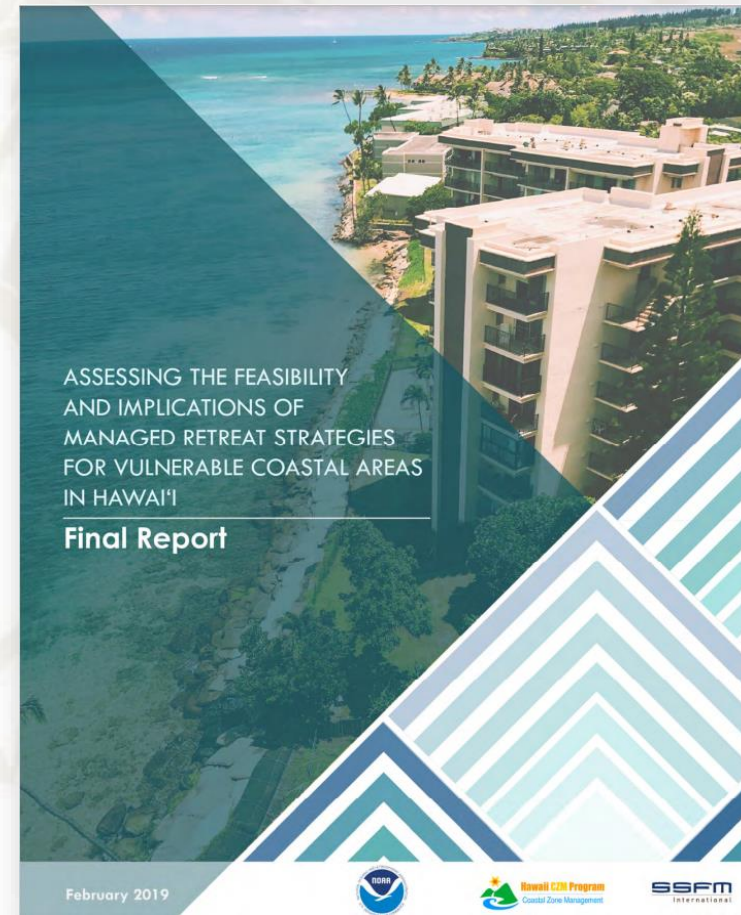
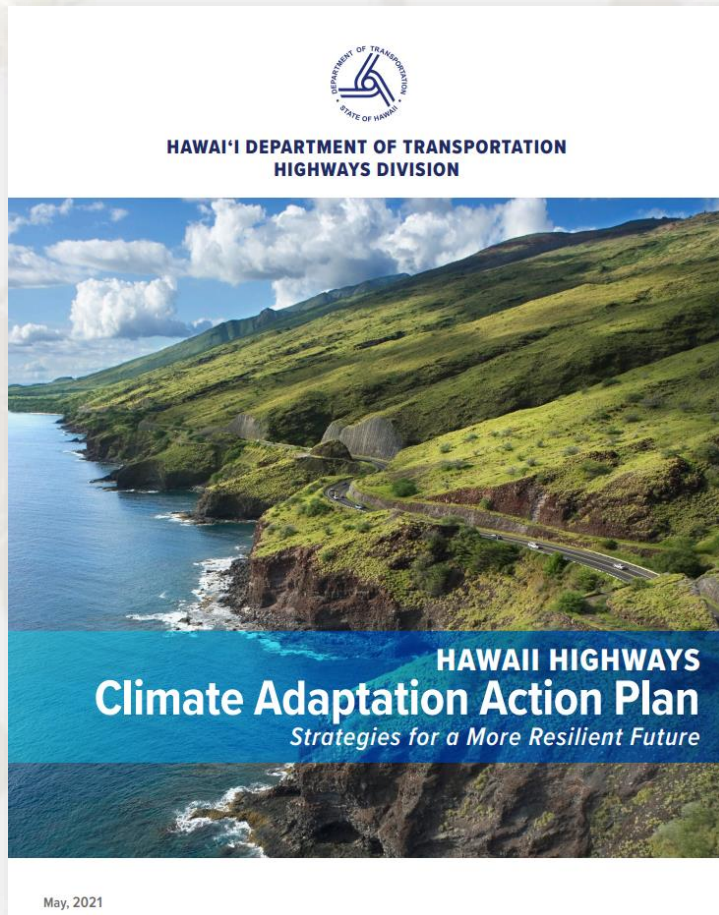
- Many of the elements included in the broader guidance documents already exist for Hawai'i – 2017 Hawaii SLR Vulnerability & Adaptation Report, Climate Change Priority Guidelines, etc.
- Standardized template encourages alignment of efforts, and could create a system for prioritizing projects
- State recognized assessments could be used as supporting documentation for CIP funding

**Broad recommendations
and best practices**

**Specific procedure with
standardized templates**



Concurrent Statewide Initiatives



Mahalo!

<http://planning.hawaii.gov/czm>

<https://ormp.hawaii.gov/>

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